

Amendments to the Specification:

Please replace paragraph [0009] with the following amended paragraph:

- 5 The fluoride-containing wastewater is then delivered to a first reaction tank 14 to perform a primary calcium chloride addition process 54. When the primary calcium chloride addition process 54 is accomplished, the wastewater is then delivered to a second reaction tank 16 to perform a secondary calcium chloride addition process 56 so that the calcium ions of calcium chloride react with the fluoric ions of the wastewater and form calcium fluoride. The calcium fluoride and the wastewater are then delivered to a rapid mixing tank 18, a slow mixing tank 22, a ~~setting~~ settling tank 24, and a concentration tank 26 therein the calcium fluoride is separated from the wastewater by performing a solid-liquid separation process, such as adding agglutinators or flocculants. After that, the wastewater is able to meet the wastewater discharge standard, and a draining process 62 is performed
- 10
- 15 to discharge the wastewater.

Please replace paragraph [0010] with the following amended paragraph:

- 20 Generally speaking, the primary calcium chloride addition process 54 performed in the first reaction tank 14 is a preliminary reaction which works to remove approximately 70% to 90% of fluoric ions. Therefore, the dosage of calcium chloride is determined quantitatively by experimental data. In other words, the dosage of calcium chloride is fixed. On the other hand, the secondary calcium chloride addition process 56 performed

in the second reaction tank 16 is dynamic. This means a feed back control 60 is used to dynamically adjust the dosage of calcium chloride in the secondary calcium chloride addition process 56 according to the result of a fluoric ion detection process 58 which detects the concentration of fluoric ions in the ~~setting~~ settling tank 24. For example, if the
5 concentration of the fluoric ions detected in the ~~setting~~ settling tank 24 is excessive, the dosage of calcium chloride in the secondary calcium chloride addition process 56 is accordingly increased to reduce the concentration of the fluoric ions in the wastewater.

Please replace paragraph [0011] with the following amended paragraph:

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It is to be noted that the wastewater contains not only the fluoride, but also considerable sulfuric acid (H_2SO_4), nitric acid (HNO_3), and phosphoric acid (H_3PO_4), therefore calcium sulfate (CaSO_4), calcium nitrate ($\text{Ca}(\text{NO}_3)_2$), and calcium phosphate ~~phosphorate~~ ($\text{Ca}_3(\text{PO}_4)_2$) are also formed as well as calcium fluoride precipitate when calcium chloride
15 is added into the wastewater. This leads to waste of calcium chloride. In addition, the concentration of fluoric ions is not stable. For example, if the concentration of fluoric ions changes dramatically, such as a transient high value appearing, the secondary calcium chloride addition process 56 will fail to control the concentration immediately. This makes the discharged wastewater have a high fluoric ion concentration, and thus causes
20 environmental pollution.

Please replace paragraph [0023] with the following amended paragraph:

The fluoride-containing wastewater is then delivered to a first reaction tank 112, and a feed forward control 214 is adopted to control a primary calcium salt addition process 216 to add calcium salt. The calcium ions of the calcium salt will react with the fluorine ions of the wastewater, form calcium fluoride, and therefore reduce the fluorine ions contained in the wastewater. Since the pH value of the fluoride-containing wastewater fluctuates inevitably to a certain extent, the feed forward control 214 is performed by using a PID controller to control the dosage of the calcium salt to be added according to the fluorine ion concentration detected in the primary fluorine ion concentration detection process 212. In addition, the PID controller can be set to a multi-stage control mechanism, which means the fluorine ion concentration is divided into several stages, and the proportion of increasing the dosage to be added is proportional to the stages. Accordingly, even if the amount of fluorine ions in the wastewater increases suddenly, the dosage calcium salt is dynamically adjusted. Furthermore, in this embodiment, the calcium salt is a mixture of calcium hydroxide and calcium chloride. As a result, two equivalent hydroxide ions are provided along with the calcium ions to reduce the acidity of the fluoride-containing wastewater. Also, the fluoride-containing wastewater in the first reaction tank 112 is still in an acidic condition, and thus the development of calcium sulfate, calcium nitride, and calcium ~~phosphate~~ phosphorite is inhibited.

20 Please replace paragraph [0025] with the following amended paragraph:

The fluoride-containing wastewater and the calcium fluoride are then delivered into a second reaction tank 114 to undergo a secondary calcium salt addition process 218 to add calcium salt again. The calcium ions of the calcium salt will react with the fluorine ions in the wastewater, and thus the fluorine ion concentration is reduced. Simultaneously, a neutralization process 220 is performed in the second reaction tank 114 by adding acid or

alkaline chemicals ~~medicaments~~, such as sodium hydroxide or hydrochloride, so as to maintain a near neutral condition in the second reaction tank 114. In this embodiment, the calcium salt added in the secondary calcium salt addition process 218 includes calcium hydroxide and calcium chloride, which respectively provide calcium ions and hydroxide ions, and thus the concentration of fluorine ions and hydrogen ions in the wastewater is reduced.

Please replace paragraph [0026] with the following amended paragraph:

10 The wastewater and the calcium fluoride are then delivered in turn to a rapid mixing tank 116, a slow mixing tank 118, a ~~setting~~ settling tank 120, and a concentration tank 122 in which the calcium fluoride is separated from the wastewater by performing a solid-liquid separation process, such as agglutination or flocculation. After that, the wastewater is able to meet the wastewater discharge standard, and a draining process 226 is performed to

15 discharge the wastewater. In this embodiment, when the wastewater and the calcium fluoride are delivered from the second reaction tank 114 to the rapid mixing tank 116, proper amounts of flocculants (e.g. poly aluminum chloride) and the pH value is well controlled so that the calcium fluoride forms calcium fluoride flocs by the flocculation effect. The calcium fluoride flocs and the wastewater are then delivered from the rapid

20 mixing tank 116 to the slow mixing tank 118, and polymer chemicals ~~medicaments~~ are added so that calcium fluoride flocs develop due to polymer cross-linking effect. The wastewater and the calcium fluoride flocs are then delivered to the ~~setting~~ settling tank 120. The calcium fluoride flocs will gradually separate from the wastewater due to different specific gravities. The calcium fluoride flocs are then concentrated in the

25 concentration tank 122 to reduce the processing costs.

Please replace paragraph [0027] with the following amended paragraph:

The operation procedure of the fluoride-containing wastewater treatment system 110 further includes a feed back control 224. As shown in Fig.3 and Fig.4, when the
5 solid-liquid separation process is accomplished in the ~~setting~~ settling tank 120, a secondary fluoric ion concentration detection process 222 is performed upon the separated wastewater. Since the wastewater in the ~~setting~~ settling tank 120 is adjusted to a neutral condition, the fluoric ion meter can directly measure the concentration of fluoric ions without preparing any buffer solutions. The feed back control 224 is performed to
10 dynamically adjust the dosage of calcium salt added in the secondary calcium salt addition process 218 according to the result of the secondary fluoric ion concentration detection process 222. The feed back control 224 can also be controlled by a PID controller. For example, if the fluoric ion concentration detected in the ~~setting~~ settling tank 120 is excessive, the dosage of the calcium salt added in the secondary calcium salt
15 addition process 218 is accordingly increased. Consequently, the fluoric ion concentration in the wastewater is reduced, and can be legally discharged.